



## TOUGH Switch Poe PRO

8-Port Power over Ethernet Managed Switch PRO

Model: TS-8-PRO

QUICK START GUIDE

#### Introduction

Thank you for purchasing the Ubiquiti Networks TOUGHSwitch™ PoE PRO, model TS-8-PRO. It is part of the TOUGHSwitch series:

Name	Model	Description
TOUGHSwitch PoE	TS-5-POE	5-port managed switch featuring 24V PoE
TOUGHSwitch PoE PRO	TS-8-PRO	8-port managed switch featuring 24V or 48V PoE
TOUGHSwitch PoE CARRIER	TS-16-CARRIER	Two TOUGHSwitch PoE PROs mounted in a rack

For more information, visit www.ubnt.com.

This Quick Start Guide is designed to guide you through the installation of the TOUGHSwitch PoE PRO and show you how to access the Configuration Interface.

## **Package Contents**







**Quick Start Guide** 



Power Cord

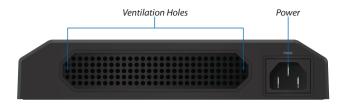
## Installation Requirement

For outdoor applications, shielded Category 5 (or above) cabling should be used for all wired Ethernet connections and should be grounded through the AC ground of the power supply.

We recommend that you protect your outdoor networks from the most brutal environments and devastating ESD attacks with industrial-grade shielded Ethernet cable from Ubiquiti Networks™. For more details, visit **www.ubnt.com/toughcable** 

#### Hardware

#### **Back Panel**





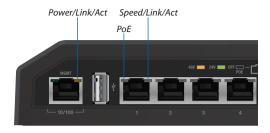
Note: There are additional ventilation holes on the top and sides of the TOUGHSwitch.

#### **Front Panel Ports**



Interface	Description
Management	10/100 Mbps port for management. Traffic between the <i>Management</i> port and numbered ports will be limited to 10/100 Mbps and, under heavy load, may cause performance degradation of the TOUGHSwitch.
USB	Reserved for future use.
1-8	10/100/1000 Mbps ports for switching and PoE (also available for management by default).
Reset	To reset to factory defaults, press and hold the <b>Reset</b> button for more than five seconds while the unit is already powered on.

## **Front Panel LEDs**



	LED	State	Status
Management	Power/ Link/Act	Off	No power
		Amber	After bootup, the LED indicates power. After an initial link is established, the LED indicates a 10/100 Mbps connection. If the link terminates, the LED turns off until a link is re-established. If the unit reboots, the LED will again indicate power until a link is established.
		Amber Flashing	Link activity at 10/100 Mbps
1-8	PoE	Off	No Power over Ethernet
		Green	24V Power over Ethernet
		Amber	48V Power over Ethernet
	Speed/ Link/Act	Off	No link
		Amber	Link established at 10/100 Mbps
		Amber Flashing	Link activity at 10/100 Mbps
		Green	Link established at 1000 Mbps
		Green Flashing	Link activity at 1000 Mbps

#### Hardware Installation

Place the TOUGHSwitch on a bench top or other flat surface.



Note: Keep 20 mm of clearance next to the ventilation holes for adequate airflow.

## **Connecting Power**

1. Connect the *Power Cord* to the *Power* port of the TOUGHSwitch.



2. Connect the other end of the Power Cord to a power outlet.



## **Connecting Ethernet**

 Connect an Ethernet cable from the Ethernet port of your computer to the Management port of the TOUGHSwitch.



Connect Ethernet cables from the Ethernet ports of your devices to the numbered ports of the TOUGHSwitch.





Note: PoE is disabled by default on all numbered ports and is not available on the Management port. To enable PoE on the appropriate ports, use the Ports tab in the Configuration Interface.

## Accessing the Configuration Interface

Connect to the Configuration Interface by performing the following steps:

1. Ensure that your computer (or other host machine) is connected to the *Management* port on the TOUGHSwitch.



Note: By default, you can configure the TOUGHSwitch via any port; however, we recommend the *Management* port. (Access to the Configuration Interface can be limited to the *Management* port only. You can configure this setting on the *Device* tab.)

- Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet (e.g., 192.168.1.100).
- 3. Launch your web browser. Type https://192.168.1.20 in the address field. Press enter (PC) or return (Mac).



 The login screen will appear. Enter ubnt in the Username and Password fields. Click Login.



The Configuration Interface will appear, allowing you to customize your settings as needed. You can enable PoE on the *Ports* tab.

Refer to the TOUGHSwitch PoE User Guide for instructions on configuring the TOUGHSwitch. The User Guide is available at documentation ubnt.com

## Specifications

TOUGHSwitch PoE PRO		
Dimensions	210 x 185 x 41 mm	
Weight	1.24 kg	
Power Input	110-120VAC / 210-230VAC	
Max. Power Consumption	150 W	
PoE Out Voltage Range	45-48VDC / 22-24VDC	
Max. PoE Wattage Per Data Port	18W	
ESD Rating	24 kV Air / 24 kV Contact	
PoE Method	Passive	
Button	Reset	
USB Port	2.0 Type A (Reserved for Future Use)	
Processor	MIPS24K 400 MHz	
System Memory	64 MB	
Code Storage	8 MB	
Certifications	CE, FCC, IC	
Operating Temperature	-25 to 55°C (-13 to 131° F)	
Operating Humidity	90% Non-Condensing	
PoE Configurable Per Port		
Management Port	N/A	
Data Ports	Off/24V/48V	
LEDs Per Port		
Management Port	Power/Link/Activity	
Data Ports	PoE, Speed/Link/Activity	
Networking Interfaces		
Management Port	(1) 10/100 Ethernet Port	
Data Ports	(8) 10/100/1000 Ethernet Ports	

## **Safety Notices**

- 1. Read, follow, and keep these instructions.
- 2. Heed all warnings.
- 3. Only use attachments/accessories specified by the manufacturer.



WARNING: Do not use this product in location that can be submerged by water.



WARNING: Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

## **Electrical Safety Information**

- Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
- 2. There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
- This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
  - a. Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
  - The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
  - Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
  - d. Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.
  - e. Protective bonding must be installed in accordance with local national wiring rules and regulations.

## **General Warranty**

UBIQUITI NETWORKS, Inc ("UBIQUITI NETWORKS") represents and warrants that the Products furnished hereunder shall be free from defects in material and workmanship for a period of one (1) year from the date of shipment by UBIQUITI NETWORKS under normal use and operation. UBIQUITI NETWORKS sole and exclusive obligation under the foregoing warranty shall be to repair or replace, at its option, any defective Product that fails during the warranty period. The expense of removal and reinstallation of any item is not included in this warranty.

The foregoing warranty is exclusive and in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose and any warranties arising from a course of dealing, usage or trade practice with respect to the products. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of Buyer for breach of warranty and shall constitute fulfillment of all liabilities of UBIQUITI NETWORKS with respect to the quality and performance of the Products. UBIQUITI NETWORKS reserves the right to inspect all defective Products (which must be returned by Buyer to UBIQUITI NETWORKS factory freight prepaid).

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned to Buyer freight collect. UBIQUITI NETWORKS shall have no obligation to make repairs or replacement necessitated by catastrophe, fault, negligence, misuse, abuse, or accident by Buyer, Buyer's customers or any other parties. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

#### **Warranty Conditions**

The foregoing warranty shall apply only if:

- The Product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident.
- (II) No modification, alteration or addition has been made to the Product by persons other than UBIQUITI NETWORKS or UBIQUITI NETWORK'S authorized representatives or otherwise approved by UBIQUITI NETWORKS.
- (III) The Product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation.
- (IV) All Ethernet cabling runs use CAT5 (or above) shielded cabling.

Disclaimer: UBIQUITI NETWORKS does not warrant that the operation of the products is error-free or that operation will be uninterrupted. In no event shall UBIQUITI NETWORKS be responsible for damages or claims of any nature or description relating to system performance, including coverage, buyer's selection of products for buyer's application and/or failure of products to meet government or regulatory requirements.

#### Returns

In the unlikely event a defect occurs, please work through the dealer or distributor from which this product was purchased.

#### Compliance

#### **FCC**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### **Industry Canada**

This Class A digital apparatus complies with Canadian ICES-003.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference, and
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe A est confrome à la norme NMB-003 Canada.

Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisies de façon que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

Cet appareil est conforme à la norme RSS Industrie Canada exempts de licence norme(s). Son fonctionnement est soumis aux deux conditions suivantes:

- 1. Cet appareil ne peut pas provoquer d'interférences et
- Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

#### **CE Marking**

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

#### **RoHS/WEEE Compliance Statement**



#### **English**

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

#### Deutsch

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist , nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

#### Español

La Directiva 2002/96/CE de la UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

#### Français

La directive européenne 2002/96/CE exige que l'équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiqués par le gouvernement et les pouvoirs publics des collectivités territoriales. L'élimination et le recyclage en bonne et due forme ont pour but de lutter contre l'impact néfaste potentiel de ce type de produits sur l'environnement et la santé publique. Pour plus d'informations sur le mode d'élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l'endroit où vous avez acheté le produit.

#### Italiano

La direttiva europea 2002/96/EC richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull'imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per la salute dell'essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.

## **Declaration of Conformity**

Česky UBIQUITI NETWORKS tímto prohla uje, e tento UBIQUITI

[Czech] NETWORKS device, je ve shod se základními po adavky a dal ími p

íslu n mi ustanoveními sm rnice 1999/5/ES.

Dansk Undertegnede UBIQUITI NETWORKS erklærer herved, at følgende (Danish) udstyr UBIQUITI NETWORKS device, overholder de væsentlige krav

og øvrige relevante krav i direktiv 1999/5/EF.

Nederlands Hierbij verklaart UBIQUITI NETWORKS dat het toestel UBIQUITI

[Dutch] NETWORKS device, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Bij deze verklaart UBIQUITI NETWORKS dat deze UBIQUITI NETWORKS device, voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

English Hereby, UBIQUITI NETWORKS, declares that this UBIQUITI

NETWORKS device, is in compliance with the essential requirements

and other relevant provisions of Directive 1999/5/EC.

Eesti Käesolevaga kinnitab UBIQUITI NETWORKS seadme UBIQUITI

[Estonian] NETWORKS device, vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

Suomi UBIQUITI NETWORKS vakuuttaa täten että UBIQUITI NETWORKS device, tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen

mukainen

Français Par la présente UBIQUITI NETWORKS déclare que l'appareil UBIQUITI NETWORKS, device est conforme aux exigences

1999/5/CE.

Deutsch Hiermit erklärt UBIQUITI NETWORKS, dass sich diese UBIQUITI NETWORKS device, in Übereinstimmung mit den grundlegenden

Anforderungen und den anderen relevanten Vorschriften der

essentielles et aux autres dispositions pertinentes de la directive

Richtlinie 1999/5/EG befindet". (BMWi)

Ελληνική ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ UBIQUITI NETWORKS ΔΗΛΩΝΕΙ ΟΤΙ UBIQUITI [Greek] ΝΕΤWORKS device, ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ

ΑΠΑΙΤΉΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΈΣ ΣΧΕΤΙΚΈΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ

1995/5/EK.

Magyar Alulírott, UBIQUITI NETWORKS nyilatkozom, hogy a

UBIQUITI NETWORKS device, megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

 Íslenska
 Hér me I sir UBIQUITI NETWORKS yfir ví a UBIQUITI NETWORKS

 Ilcelandic
 device, er í samræmi vi grunnkröfur og a rar kröfur, sem ger ar eru í

tilskipun 1999/5/EC.

 Italiano
 Con la presente UBIQUITI NETWORKS dichiara che questo UBIQUITI

 [Italian]
 NETWORKS device, è conforme ai requisiti essenziali ed alle altre

disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

[Hungarian]

Latviski Ar o UBIQUITI NETWORKS deklar , ka UBIQUITI NETWORKS device, atbilst Direkt vas 1999/5/EK b tiskaj m pras b m un citiem ar to saist

tajiem noteikumiem.

Lietuviškai UBIQUITI NETWORKS deklaruoja, kad šis UBIQUITI NETWORKS įrenginys atitinka esminius reikalavimus ir kitas 1999/5/EB

Direktyvos nuostatas.

Malti Hawnhekk, UBIQUITI NETWORKS, jiddikjara li dan UBIQUITI
[Maltese] NETWORKS device, jikkonforma mal- ti ijiet essenzjali u ma

provvedimenti o rajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Norsk
UBIQUITI NETWORKS erklærer herved at utstyret UBIQUITI
NETWORKS device, er i samsvar med de grunnleggende krav og
øvrige relevante krav i direktiv 1999/5/EF.

Slovensky UBIQUITI NETWORKS t mto vyhlasuje, e UBIQUITI NETWORKS device, sp a základné po iadavky a v etky príslu né ustanovenia

Smernice 1999/5/ES.

Svenska Härmed intygar UBIQUITI NETWORKS att denna UBIQUITI

[Swedish] NETWORKS device, står I överensstämmelse med de väsentliga

egenskapskrav och övriga relevanta bestämmelser som framgår av

direktiv 1999/5/EG.

Español Por medio de la presente UBIQUITI NETWORKS declara que el

UBIQUITI NETWORKS device, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la

y cualesquiera otras disposiciones aplicables o exigibles o

Directiva 1999/5/CE.

Polski Niniejszym, firma UBIQUITI NETWORKS o wiadcza, e produkt serii [Polish] UBIQUITI NETWORKS device, spełnia zasadnicze wymagania i inne

istotne postanowienia Dyrektywy 1999/5/EC.

Português UBIQUITI NETWORKS declara que este UBIQUITI NETWORKS device, [Portuguese] está conforme com os requisitos essenciais e outras disposições da

Directiva 1999/5/CE.

Română Prin prezenta, UBIQUITI NETWORKS declară că acest dispozitiv
UBIQUITI NETWORKS este în conformitate cu cerințele esențiale și

alte prevederi relevante ale Directivei 1999/5/CE.

# **TOUGH**Cable<sup>™</sup>

## **English**

We recommend that you protect your networks from the most brutal environments and devastating ESD attacks with industrial-grade shielded Ethernet cable from Ubiquiti Networks. For more details, visit www.ubnt.com/toughcable



#### Deutsch

Schützen Sie Ihre Netzwerke vor extremen Umwelteinflüssen und verheerender elektrostatischer Entladung (ESD), indem Sie abgeschirmte Ethernetkabel in Unternehmensqualität von Ubiquiti Networks verwenden. Weitere Informationen erhalten Sie unter www.ubnt.com/toughcable

## **Español**

Le recomendamos que proteja sus redes de los entornos más hostiles y los devastadores efectos de las descargas electrostáticas utilizando cable Ethernet blindado con calidad-industrial de Ubiquiti Networks. Para obtener más información, visite www.ubnt.com/toughcable

#### **Francais**

Nous vous recommandons de protéger vos réseaux contre les environnements les plus brutaux et les décharges électrostatiques les plus dévastatrices avec un câble Ethernet Ubiquiti Networks avec blindage renforcé. Pour en savoir plus, rendez-vous sur www.ubnt.com/toughcable

#### Italiano

Si consiglia di proteggere le reti dagli ambienti e dagli attacchi ESD più invasivi con il cavo Ethernet schermato-di tipo industriale di Ubiquiti Networks. Per ulteriori informazioni, visitare il sito Web www.ubnt.com/toughcable

## **Ubiquiti Networks Support**

Email: support@ubnt.com

Phone (9 a.m. - 5 p.m. PST): 408-942-1153

### **Online Resources**

Wiki Page: wiki.ubnt.com

Support Forum: **forum.ubnt.com**Downloads: **downloads.ubnt.com** 

